

effect of TNF which, after being purified by subjecting a crude protein recovered from a dialyzed concentrate of human urine to affinity chromatography on a column of immobilized TNF, elutes from a reversed-phase high pressure liquid chromatography column [and] as a single peak in a fraction corresponding to about 31% acetonitrile and shows a molecular weight of about 30 kDa when measured by SDS-PAGE under reducing conditions.

Insert new claim 51 as follows:

51. An isolated DNA molecule comprising

(1) a contiguous nucleotide sequence coding for a naturally occurring human Tumor Necrosis Factor (TNF) binding protein (TBP-II) having the following characteristics:

- H2
- (a) includes the amino acid sequence Thr-Pro-Tyr-Ala-Pro-Glu-Pro-Gly-Ser-Thr in the portion of the protein sequenced by N-terminal sequence analysis; and
 - (b) has the ability to inhibit the cytotoxic effect of TNF; or

(2) a contiguous nucleotide sequence coding for a fragment of said TBP-II which has the ability to inhibit the cytotoxic effect of TNF.

Rewrite claims 35 and 36 in amended form as follows:

X3
35 (Amended). An isolated DNA molecule in accordance with claim 51, comprising

(1) the nucleotide sequence coding for a naturally occurring human Tumor Necrosis Factor (TNF) binding protein (TBP-II) having the following characteristics:

- i. [an N-terminal] includes the amino acid sequence[: Xaa] Thr-Pro-Tyr-Ala-Pro-Glu-Pro-Gly-Ser-Thr in the portion of the protein sequenced by N-terminal sequence analysis[, where Xaa consists of the following amino acid sequences: Thr, Val-Ala-Phe-Thr-, and Phe-Thr]; and
- ii. the ability to inhibit the cytotoxic effect of TNF- α on murine A9 cells[.], or

1X3
(2) a contiguous nucleotide sequence coding for a fragment of said TBP-II which has the ability to inhibit the cytotoxic effect of TNF- α on murine A9 cells.

36 (Amended). An isolated DNA molecule comprising

(1) the nucleotide sequence coding for a naturally occurring human Tumor Necrosis Factor (TNF) binding protein (TBP-II) having the following characteristics:

- i. [an N-terminal] includes the amino acid sequence[: Xaa] Thr-Pro-Tyr-Ala-Pro-Glu-Pro-Gly-Ser-Thr in the portion of the protein sequenced by N-terminal sequence analysis[, where Xaa consists of the following amino acid sequences: Thr, Val-Ala-Phe-Thr- and Phe-Thr]; and
- ii. the ability to inhibit the cytotoxic effect of TNF- α on murine A9 cells; and

iii. a molecular weight of about 30kd in reducing SDS-PAGE analysis[.], or

(2) a contiguous nucleotide sequence coding for a fragment of said TBP-II which has the ability to inhibit the cytotoxic effect of TNF- α on murine A9 cells.

Claim 37, line 2, change "36" to --51--.

Rewrite claim 46 (amended) in twice-amended form as follows:

46 (Twice-amended). An isolated DNA molecule comprising (1) a contiguous nucleotide sequence coding for a protein consisting of naturally occurring human Tumor Necrosis Factor (TNF) Binding Protein II, herein designated TBP-II, said TBP-II including[, at the N-terminal region thereof,] the amino acid sequence: Thr-Pro-Tyr-Ala-Pro-Glu-Pro-Gly-Ser-Thr in the portion of the protein sequenced by N-terminal sequence analysis, said protein having the ability to inhibit the cytotoxic effect of TNF, wherein said naturally occurring TBP-II protein is the same as that protein having the ability to inhibit the cytotoxic effect of TNF which, after being purified by subjecting a crude protein recovered from a dialyzed concentrate of human urine to affinity chromatography on a column of immobilized TNF, elutes from a reversed-phase high pressure liquid chromatography column [and] as a single peak in a fraction corresponding to about 31% acetonitrile and shows a molecular weight of about 30 kDa when measured by SDS-PAGE under reducing conditions, or (2) a contiguous nucleotide sequence